# FOURTH FIVE-YEAR REVIEW REPORT
# ASBESTOS DUMP SUPERFUND SITE
# OPERABLE UNIT 1 AND OPERABLE UNIT 2
# MILLINGTON/MEYERSVILLE, MORRIS COUNTY, NEW JERSEY

**Prepared by**

**U.S. Environmental Protection Agency**
**Region 2**
**New York, New York**

**Approved by:**

**Walter E. Mugdan, Director**
**Emergency and Remedial Response Division**

**Date:** Sept. 18, 2015

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This is the fourth five-year review for the Asbestos Dump Operable Units 1 and 2 Superfund Site located in Millington and Meyersville, Morris County, New Jersey. The purpose of this five-year review is to review information to determine if the remedy is and will continue to be protective of human health and the environment. The triggering action for this statutory five-year review was the completion of the 3rd five-year review in September 2010.

This review found that the remedies for Operable Unit 1 (OU1) and Operable Unit 2 (OU2) are functioning as intended by the Decision Document, and are protective of human health and the environment. A five-year review for Operable Unit 3 (OU3) is being prepared by the U.S. Department of Interior/Fish and Wildlife Service as a separate report.

Five-Year Review Summary Form

| SITE IDENTIFICATION | | |
|---|---|---|
| **Site Name:** Asbestos Dump | | |
| **EPA ID:** NJD980654149 | | |
| **Region:** 2 | **State:** NJ | **City/County:** Millington, Meyersville/Morris County |

| SITE STATUS | |
|---|---|
| **NPL Status:** Deleted | |
| **Multiple OUs?**<br>Yes | **Has the site achieved construction completion?**<br>Yes |

| REVIEW STATUS |
|---|
| **Lead agency:** EPA<br>***[If "Other Federal Agency", enter Agency name]*:** |
| **Author name (Federal or State Project Manager):** Theresa Hwilka |
| **Author affiliation:** EPA |
| **Review period:** 9/1/2010 – 6/1/2015 |
| **Date of site inspection:** 1/15/2015 |
| **Type of review:** Statutory |
| **Review number:** 4 |
| **Triggering action date:** 9/1/2010 |
| **Due date *(five years after triggering action date)*:** 9/1/2015 |

| Issues/Recommendations |
|---|

| OU(s) without Issues/Recommendations Identified in the Five-Year Review: |
|---|
| *OU1, OU2* |

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| Protectiveness Statement(s) | | |
|---|---|---|
| *Operable Unit:*<br>OU1 | *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>The remedy at OU1 is protective of human health and the environment. | | |

| Protectiveness Statement(s) | | |
|---|---|---|
| *Operable Unit:*<br>OU2 | *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>The remedy at OU2 is protective of human health and the environment. | | |

| Sitewide Protectiveness Statement | |
|---|---|
| *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>The remedies at OU1 and OU2 are protective of human health and the environment. | |

## Introduction

The purpose of a five-year review is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment and is functioning as intended by the decision documents. The methods, findings, and conclusions of reviews are documented in the five-year review. In addition, five-year review reports identify issues found during the review, if any, and document recommendations to address them.

This is the fourth five-year review for the Asbestos Dump Superfund site, located in Millington and Meyersville, Morris County, New Jersey. This five-year review was conducted by the Environmental Protection Agency (EPA) Remedial Project Manager (RPM) Theresa Hwilka. The review was conducted pursuant to Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §9601 *et seq.* and 40 CFR 300.430(f)(4)(ii), and in accordance with the *Comprehensive Five-Year Review Guidance*, OSWER Directive 9355.7-03B-P (June 2001). This report will become part of the site file.

The triggering action for this statutory review is the previous five-year review, which was completed in September 2010. A five-year review is required at this site due to the fact that hazardous substances, pollutants or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure. The site consists of three operable units, some of which are addressed in this five-year review. Operable Unit 1 (OU1) and Operable Unit 2 (OU2) are addressed in this five-year review report. A five-year review for Operable Unit 3 (OU3) is being prepared by the Department of the Interior's U.S. Fish and Wildlife Service (FWS) as a separate report.

## Site Chronology

See Table 1 for the site chronology.

## Background

### *Physical Characteristics*

OU1 consists of the “Millington site” which is an 11-acre commercial property located at 50 Division Avenue in Millington, New Jersey. The Millington site is bounded on the west by the Passaic River, on the north by the Millington Train Station, and on the east and south by commercial and private residences, respectively. The OU1 portion of the site is in a relatively populated area.

OU2 includes the “New Vernon Road” and “White Bridge Road” sites. The OU2-New Vernon Road site is located at 237 New Vernon Road in Meyersville, Long Hill Township, Morris County, New Jersey. It consists of approximately 30 acres of land and is currently bounded by the Great Swamp National Wildlife Refuge (GSNWR) to the north, tracts of wooded and wetland areas to the east and south, and New Vernon Road to the west. The GSNWR is an environmentally sensitive area. The property previously included two residences and a large

garage structure. The property currently consists of one residence and a large garage/barn structure and a small parking area.

The OU2-White Bridge Road site is located at 651 White Bridge Road in Long Hill Township, New Jersey. It is approximately two miles away from the New Vernon Road site and consists of approximately 12-acres of land, as well as adjoining property, which is part of the GSNWR, in Meyersville, New Jersey. The site is bounded by White Bridge Road to the north, the GSNWR to the east and southeast, Black Brook to the southwest, and a wooded lot to the west. One private residence, including a two-story home, garage, two sheds and three stables, is currently located on the site. The property also includes a series of fenced-in grazing fields.

(See Figure 1, Figure 2 and Figure 3 for operable unit locations)

*Site Geology/Hydrogeology*

The OU1 property is located between the Second and Third Watchung Basalts. The bedrock geology in this area consists of coarse-grained siltstone of the Towaco formation. The overall geology at this property consists of fill that is situated on a silt/clay deposit that directly overlies bedrock. The OU2 New Vernon Road and White Bridge Road properties consist of unconsolidated deposits of various composition that are present throughout the site in various thicknesses and depths. The existence and spatial distribution of these deposits is typical of glacial and swamp deposits.

At the OU1 property, groundwater flow is in an east-west direction toward the Passaic River under the influence of bedrock topography. Due to the variation of fill material, depending on the location at the site, groundwater occurs from approximately 2 feet to 36 feet below ground surface at the OU1 property and migrates directly into the Passaic River, which has not been adversely impacted by groundwater discharges from the site. In addition, the community is served by a public water supply system and there are no downgradient potable wells within the vicinity of the site. Groundwater flow direction at the OU2 New Vernon Road property is in a southwest to northeast direction with an extremely low gradient which is indicative of slow groundwater flow. The water table fluctuates from a depth of one to five feet from the surface. Groundwater flow direction at the OU2 White Bridge Road property is northeast toward the Great Swamp National Wildlife Refuge. Like the New Vernon hydrology, there is a low groundwater gradient which suggests that groundwater movement is slow.

*Land and Resource Use*

The OU1 property serves as an industrial park, consisting of four large commercial buildings and a parking lot which is used for trailer truck parking. There is no access to the asbestos-containing area from the parking lot as it is enclosed by a locked entrance gate, chain link fence and retaining wall. Land use for the OU1 portion of the site and surrounding area has not changed since the last five-year review.

The OU2 New Vernon Road property previously consisted of two residences and a large garage structure; however, it currently consists of one residence, a large garage/barn structure and a small parking area which is owned by US Fish and Wildlife Service (FWS). Land use for the

OU2 New Vernon Road property and the surrounding area has not changed since the last five-year review.

The OU2 White Bridge Road property is used for residential purposes as well as for a horse boarding business. One private residence, including a two-story home, garage, two sheds and three stables, is currently located on the site. The property also includes a series of fenced-in grazing fields. Land use for the OU2 White Bridge Road property and the surrounding area has not changed since the last five-year review.

*History of Contamination*

Manufacturing of asbestos-containing material (ACM) began at the Millington site in 1927 by Asbestos, Ltd., which engaged in the fiberization and sale of asbestos until 1946. While the property had changed ownership over the years, ACM continued to be produced until 1975 when the plant was closed by the National Gypsum Company (NGC), the owner at the time. During the period in which the asbestos manufacturing facility was in operation, asbestos-containing waste had been disposed of on the Millington site. This included a 330-foot by 75-foot area (referred to as the asbestos mound) where predominantly asbestos fibers, siding and roofing material were disposed. When the Millington site had reached its capacity for on-site disposal, asbestos-containing waste materials were disposed of off-site at the New Vernon Road, White Bridge Road, and the Dietzman Tract (OU3) sites.

*Initial Response*

In September 1984, EPA issued a notice letter to the NGC notifying the company of its liability as a potentially responsible party (PRP) and offering the company an opportunity to conduct a remedial investigation (RI) and feasibility study (FS). In April 1985, EPA issued an Administrative Order to NGC to conduct the RI/FS at the four properties comprising the site. NGC performed RI activities in 1986 and 1987 (hereinafter referred to as the NGC RI). EPA performed oversight of these activities. In May 1987, the RI report was submitted to EPA. Upon review, EPA determined that while the NGC RI had adequately characterized contamination at the Millington site, the RI failed to adequately characterize the nature and extent of contamination at the New Vernon Road, White Bridge Road and Dietzman Tract sites. In September 1989, EPA issued a Unilateral Administrative Order (UAO) to NGC, for the performance of the remedial design and remedial action at the Millington site. In August 1990, EPA collected and analyzed soil and dust samples at the New Vernon Road and White Bridge Road sites. Contrary to data reported in NGC's RI report, high levels of asbestos were detected. EPA determined that an immediate removal action was necessary to address the imminent threat posed by the sites. In 1990, federally funded, temporary actions were conducted to immobilize asbestos contamination at the New Vernon Road and White Bridge Road sites. Removal activities were conducted at each property in response to a Health Advisory issued by the federal Agency for Toxic Substances and Disease Registry. These removal actions included: erecting signs and fences, sampling of air and soil, capping two driveways, covering visible asbestos-containing materials with geotextile fabric, removing a dilapidated shed, and removing asbestos-containing materials from the ground surface.

In October 1990, NGC filed a voluntary bankruptcy petition. In May 1991, EPA filed a Proof of

Claim for past costs at the Millington, New Vernon Road and White Bridge Road sites. EPA was awarded settlement costs for the remediation of the Millington site, New Vernon Road and White Bridge Road sites. As part of the settlement agreement, NGC was relieved of its remedial design/remedial action obligations under the 1989 UAO.

During removal activities in 1990, EPA initiated a RI/FS at the New Vernon Road and White Bridge Road OU2 sites to supplement the NGC RI and fully characterize the nature and extent of asbestos contamination. Field work was completed in the fall of 1990 and the RI and FS reports were completed in June 1991.

*Basis for Taking Action*

During the OU1 and OU2 RI, soil, surface water and groundwater samples were collected and air monitoring was performed to determine the extent of contamination and associated risks. It was determined that asbestos was the primary contaminant of concern. Note that mercury was detected in concentrations exceeding drinking water standards in groundwater samples at OU1; however, the contamination was confined to the area beneath the OU1 asbestos mound and was not expected to impact human health and the environment. Groundwater from the OU1 portion of the site migrates directly into the Passaic River, which has not been adversely impacted by groundwater discharges from the Site. In addition, the area surrounding the OU1 property is served by a public water supply system and there are no downgradient potable wells within the vicinity of OU1.

Asbestos was found in the form of broken tiles, siding and fibers at the Site. Asbestos was not detected above the current federal Maximum Contaminant Level (MCL) of 7 million fibers per liter (MFL) in the surface water and groundwater samples at OU1 and OU2.

For OU1, a summary of the qualitative risk assessment was provided in the 1988 ROD which was written at a time when risk assessment guidance was still being developed. The risk summary indicated that remedial actions, such as capping ACM with topsoil, was necessary to prevent exposure to potential airborne asbestos.

For OU2, the 1991 ROD provided a quantitative risk assessment. The risk assessment indicated that the cumulative upper bound risks associated with potential exposures to maximum asbestos concentrations in air at the New Vernon and White Bridge Road sites were $1 \times 10^{-2}$ and $3 \times 10^{-3}$, respectively. This exceeded the acceptable risk range of $10^{-4}$ to $10^{-6}$. Therefore, remedial actions were warranted.

Based on the risk assessments for OU1 and OU2, airborne asbestos was identified as the primary source of asbestos exposure. Therefore, the main objectives of the remedies for OU1 and OU2 were to contain the migration of asbestos-containing material and to eliminate exposure pathways that could present unacceptable risks.

**Remedial Actions**

*Remedy Selection*

*<u>OU1 Remedy Selection</u>*

On September 30, 1988, EPA issued a Record of Decision (ROD) for OU1. The remedial action objectives (RAOs) were to contain the migration of asbestos and prevent potential exposure to airborne asbestos through the consolidation and capping of asbestos-containing material.

The major components of the selected remedy include the following: 1) installation of a two-foot soil cover on areas of exposed or minimally covered asbestos; 2) installation of a chain-link security fence to restrict access to the asbestos mound; 3) construction of slope protection/stabilization measures along the asbestos mound embankment; 4) construction of surface runoff diversion channels on top of the asbestos mound; 5) operation and maintenance of the remedy; 6) long-term monitoring; 7) institutional controls to restrict on-site groundwater usage and limit development on the asbestos fill areas; and 8) treatability studies of technologies for permanent destruction or immobilization of asbestos.

*OU2 Remedy Selection*

On September 27, 1991, EPA issued a ROD selecting the remedial actions (RAs) for both the New Vernon Road property and the White Bridge Road property (collectively, designated OU2). The remedial action objectives were to contain the migration of asbestos and prevent potential exposure to airborne asbestos through the consolidation, solidification and capping of asbestos-containing material.

The major components of the selected remedy include the following: 1) *in-situ* solidification/stabilization of asbestos-contaminated soils; 2) appropriate environmental monitoring to confirm the effectiveness of the remedy; and 3) implementation of institutional controls to restrict future subsurface activities and assure the integrity of the treated waste.

EPA issued an Explanation of Significant Differences (ESD) on October 20, 1993, to modify the remedy specified in the OU2 ROD. The ESD documented the change in solidification/stabilization depth and called for the solidified/stabilized mass to be constructed above the groundwater table.

*Remedy Implementation*

*OU1 Remedy Implementation*

OU1 remedial action activities were conducted pursuant to the 1988 ROD. EPA entered into an Interagency Agreement (IA) with the U.S. Army Corps of Engineers (USACE) who in turn provided oversight during all remedial action activities. USACE contracted with IT Corporation (IT) to complete the remedial actions in accordance with the contract documents and all applicable state and federal regulations.

Mobilization activities began on June 17, 1999, and included the delivery of general materials, initiation of soil erosion and sediment control measures, and clearing and grubbing activities. The primary remedial construction activities included, but were not limited to, the following: 1) access road construction - completed in November 1999; 2) retaining wall construction for slope stabilization - completed in May 2000; and 3) cap construction operations and site restoration - completed in May 2000. Capping activities consisted of relocating excavated material, closing the asbestos mound, grading the ACM to the required elevations, installation of a layer of

geotextile and geogrid material, and the placement and grading of a two-foot soil cover. A retaining wall was installed at the toe of the asbestos mound for stabilization purposes. The wall is an average of 10 feet in height and 516 feet long. The final RA Report for OU1 was approved by EPA in September 2001. EPA also conducted treatability studies to fulfill the OU1 ROD requirement for evaluating innovative treatment technologies that may be effective in permanently remediating asbestos. Since the issuance of the OU1 ROD, EPA has performed treatability studies on solidification/stabilization and vitrification (thermal treatment resulting in an asbestos-free glass) and has evaluated potential applicability of thermochemical asbestos conversion (destruction) technologies. EPA elected to keep the containment remedy and not pursue options for solidification/stabilization at OU1.

With respect to institutional controls, in accordance with the NJDEP, a Deed Notice was filed by Tifa Realty, Inc., in the Morris County, New Jersey, Office of the County Clerk, on September 8, 2008, for the OU1 Millington property designated as Block 12301, Lot 1 on the Long Hill Township tax map. The Millington property is approximately 11 acres, with the restricted area comprising approximately five acres. The landfill, which is located on the five-acre restricted area, is surrounded by a fence, and contains approximately 90,000 cubic yards of asbestos and ACM. The restrictions placed on the OU1 Millington property significantly limit any type of intrusion onto the landfill, thereby restricting on-site groundwater usage and limiting development on the asbestos fill areas. Any use of the landfill area must be designed to protect the integrity of the components of the landfill remedy.

Operation and Maintenance (O&M) activities are ongoing and are performed by NJDEP.

*OU2 Remedy Implementation*

OU2 remedial action activities were conducted pursuant to the 1991 ROD and 1993 ESD. EPA contracted with CDM Federal Program Corporation (CDM) to oversee and contract for all remedial action activities.

New Vernon Road

Remedial activities for the New Vernon Road site were conducted in two phases. Phase I activities were initiated in August 1994 and were completed in December 1994. Phase I activities included the following: 1) excavation and consolidation of ACM; 2) *in-situ* solidification/stabilization of ACM; 3) impermeable cover and perimeter infiltration trench construction; 4) placement of rip rap along the sides of the cap for slope stability protection; and 5) backfill of excavation areas excluding topsoil and seeding. Upon completion of the solidification/stabilization process, the site was graded and a protective cap was placed over the solidified material. The protective cap consisted of several components including six inches of stone screenings, a geomembrane liner, a drainage layer consisting of a geocomposite, a 24-inch layer of common fill and a vegetative layer consisting of six inches of topsoil and grass. After the implementation, air monitoring was performed to demonstrate the effectiveness of this remedy.

The second phase of the remedial action activities was initiated in March 1995 and was intended to include site restoration work such as final grading with topsoil, grass establishment, planting, wetlands restoration, asphalt paving, and demobilization. The second phase was halted when EPA issued a Stop Work Order on March 30, 1995. EPA subsequently issued a Cure Notice, in

April 1995, to CDM for failure to meet the contract specification for the use of fill at both the New Vernon Road and White Bridge Road properties. The Cure Response cleanup activities at New Vernon Road were initiated in July 1998 along with restoration activities, and completed by March 1999. EPA entered into an IA with USACE to provide oversight of the Cure Response cleanup activities. In September 2000, EPA approved the RA Report for the New Vernon Road portion of OU2.

In 1998, EPA acquired the New Vernon Road site from the residential owners. In January 2002, EPA, NJDEP and the U.S. FWS reached an agreement on the terms of the transfer of a portion of the New Vernon Road property to FWS to expand the GSNWR. In September 2002, an approximate 25-acre portion of the New Vernon Road property (Block 225, Lot 30) was formally transferred to FWS and is now in use as part of the GSNWR. This Lot also includes the residential structures along New Vernon Road. The remaining five-acre portion of the property (Block 225, Lot 30.03), which contains the solidified ACM, was transferred to the State of New Jersey. NJDEP is conducting the O&M activities on the five-acre parcel of the property.

Subsequent to the division of the New Vernon Road property between NJDEP and FWS, separate Deed Notices were filed for Block 225, Lots 30 and 30.03. The Deed Notice for Block 225, Lot 30 was filed in the Morris County, New Jersey, Office of the County Clerk on August 20, 2002. The Deed Notice includes a "Limited Subsurface Use Area" which exists within 10 feet of the foundation of the residences. This area is restricted because it could not be fully investigated for the presence of asbestos since such investigation would have compromised the integrity of the substructure. Digging and excavating more than 12 inches below the surface of the Limited Subsurface Area is prohibited unless approved by EPA or NJDEP. The Deed Notice for Block 225-Lot 30.03, which pertains to the five-acre capped OU2 parcel, was filed in the Morris County, New Jersey, Office of the County Clerk on October 22, 2002. The Deed Notice specifies the restrictions placed on the capped area of OU2. The Deed Notice does not permit any disturbance of the surface or subsurface of the capped area including, but not limited to filling, drilling, excavation, or the removal of topsoil, sediments, rock or minerals, or by construction, planting anything other than grass or wildflowers, or changing the topography in any manner; however, topsoil may be added to make repairs in accordance with the Deed Notice. Changing, damaging or removing the perimeter trench around the solidified mass, the manholes or the monitoring wells is also prohibited.

White Bridge Road

Remedial construction activities for the White Bridge Road property were initiated in June 1994. The first phase of activities included excavation, solidification, backfilling and construction of the impermeable cover. Field work occurred between August 1994 and December 1994. ACM was excavated and consolidated into one central area of the White Bridge Road property. A higher volume of ACM was excavated than initially anticipated; therefore, a settlement analysis of the solidified mass was performed. Analytical results indicated that additional settlement of up to nine inches could occur, which would place the solidified mass in contact with the groundwater. As a result, the initial design solidification depth was reduced to ensure that the solidified mass did not come in contact with the water table, and this change was documented in the 1993 ESD. Approximately 25,000 cubic yards of asbestos-contaminated material was treated at the White Bridge Road site. The final depth of the solidified ACM was approximately 2.5 feet below the ground surface.

An impermeable cover was constructed over the solidified mass. The cover consisted of six inches of stone screenings, an impermeable high density polyethylene liner, a geonet drainage layer, 24 inches of common fill, and six inches of topsoil which was subsequently seeded. A perimeter trench was also installed in conjunction with the impermeable liner. The trench was three feet deep and five feet wide located on three sides of the landfill approximately three feet from the edge of the solidified mass. A minimum of a nine-inch layer of course aggregate was placed at the bottom of the trench followed by perforated and corrugated flexible pipe lain on the stone bed. At original grade, the geotextile fabric was wrapped across the top of the trench and overlapped. Furthermore, the trench was finished with a sloped layer of four-inch stone. A drainage layer, consisting of geosynthetic materials was placed over the geomembrane and common fill was placed over the drainage layer. The final layer consisted of topsoil which was seeded to stabilize the soil and establish grass cover.

The second phase of remedial construction activities included site restoration. Site restoration included topsoil placement, fence construction, monitoring well installation, stockpile removal, seeding and landscape replacement. This phase was conducted between March and November 1995.

As described earlier for the OU2-New Vernon Road site, after implementation of the first phase of the remedy, EPA discovered that some of the fill material, which was used by the contractor on the White Bridge Road property, had originated from a facility subject to the New Jersey Industrial Site Recovery Act. On April 7, 1995, EPA issued a Cure Notice to its contractor, CDM, indicating that this material failed to meet the contract specifications for fill. The unacceptable fill was addressed by placing a three-inch layer of stone screening over the unacceptable fill in the stable area and removing five cubic yards of unacceptable fill from the stockpile area. The work performed under the Cure Notice Response Workplan was completed on August 28, 1995 and was performed at no cost to EPA or the State.

On January 5, 2001, the owners of the OU2 White Bridge Road property filed a Deed Notice with the Morris County Clerk. EPA and the State of New Jersey agreed on the terms of the Deed Notice. The Deed Notice has the same general restrictions as those included in the New Vernon Road Deed Notice whereby any disturbance of the surface or subsurface cap is strictly prohibited. In addition, the White Bridge Road Deed Notice specifically prohibits the following: horseback riding; any activity that might compromise the integrity of the solidified mass or its cap; and moving the fence posts installed on the top of the solidified mass area.

In February 2002, EPA deleted the White Bridge Road portion of the Asbestos Dump Superfund Site from the National Priorities List (NPL). The remaining portions of the Site, including OU1, OU2-New Vernon Road and OU3, were deleted in July 2010.

*System Operations/Operation and Maintenance*

*OU1*

In September 2001, EPA approved the 30-Year O&M Plan. NJDEP is currently responsible for O&M activities. The O&M Plan documents the installation of a six-foot high chain link security fence which surrounds the site on its north, east and south limits. A double swing gate is located on the northeastern corner of the site which provides access to the OU1 site. Furthermore, the O&M Plan specifies that periodic inspections be conducted of all OU1 design components

including the retaining wall, perimeter access fence, capped area. Mowing/pruning of the ACM cover and surrounding areas are performed regularly. Monitoring of surface water and sediment sampling of the Passaic River, along with groundwater monitoring performed in accordance with the New Jersey landfill closure requirements and the Sampling and Analysis Plan, are included in the O&M Plan. Currently, the O&M Plan calls for groundwater, surface water and sediment sampling to be conducted once every five years. However, due to a detection of asbestos in sediment at sample location MSD-4 during the April 2015 sampling event, it is recommended that the five surface water and collocated five sediment samples in OU1 be sampled two times within the next five year period. NJDEP has agreed to comply with this follow-up action for the 2015-2020 five year review period.

*OU2 – New Vernon Road*

The O&M plan for the New Vernon Road site was finalized in June 2001 and is implemented by NJDEP. The overall objective of the O&M Plan is to provide for periodic inspection, maintenance, and monitoring to evaluate and maintain the effectiveness of the remedy implemented at the site. The landfill cap, perimeter infiltration trench and environmental monitoring, are the key components of the O&M Plan. Environmental monitoring includes the collection and analysis of groundwater. Environmental monitoring is conducted once every five years.

*OU2 – White Bridge Road*

An O&M Plan was developed for the White Bridge Road site in July 2001. The O&M Plan includes the maintenance and monitoring of site features including the landfill cap, perimeter infiltration trench, and environmental monitoring. O&M obligations are shared between both the property owners and NJDEP. Property owners are largely responsible for mowing and maintaining the capped area along with maintaining other site features while NJDEP is primarily responsible for the environmental monitoring activities. Details of the O&M obligations are outlined in the January 2001 Deed Notice. Groundwater monitoring is conducted once every five years.

Potential site impacts from climate change have been assessed for OU1, OU2 New Vernon Road and OU2 White Bridge Road, and the performance of the remedy is currently not at risk due to the expected effects of climate change in the region and near the site.

**Progress Since Last Five-Year Review**

The last five-year review was completed in September 2010. It was determined that the implementation of the remedial actions at OU1 and OU2, along with the institutional controls identified above, have interrupted potential exposures. The remedy is functioning as intended by the decision documents and is protective of public health and the environment.

The 2010 five-year review report identified one issue that required follow-up activities. Asbestos was detected in one upstream sediment sample, MSD-5. This sample was inconsistent with previously reported data; therefore, additional sampling was recommended to be performed to confirm the presence of asbestos in the vicinity of the upstream sediment sample location.

In accordance with the recommendation made in the 2010 five-year review report, follow-up groundwater and sediment sampling was conducted by EPA in April 2011 and July 2011. During the April 2011 sampling event, the following samples were collected: three groundwater samples were collected from three monitoring wells located at OU1; two groundwater samples were collected from monitoring wells at OU2-New Vernon Road; and eleven sediment samples were collected in the vicinity of MSD-4 and MSD-5 along the Passaic River at OU1. During the July 2011 sampling event, a total of thirty-five sediment samples were collected along the Passaic River at OU1. All samples were analyzed for asbestos.

Additional samples were taken in accordance with the O&M plan for the 2015 five-year review. NJDEP collected groundwater samples in April 2015 from 13 monitoring wells: seven wells at OU1, three wells at OU2-New Vernon Road and three wells at OU2-White Bridge Road. In addition, surface water and collocated sediment samples were collected from five locations along the Passaic River in the vicinity of the OU1 property. Groundwater, surface water and sediment samples were analyzed for asbestos.

**Five-Year Review Process**

*Administrative Components*

The five-year review team included Theresa Hwilka (EPA-RPM), Diana Cutt (EPA-Hydrologist), Marian Olsen (EPA-Human Health Risk Assessor), Mindy Pensak (EPA-Ecological Risk Assessor) and Pat Seppi (EPA-Community Involvement Coordinator). OU1 and OU2 are being monitored and maintained by the State of New Jersey and US FWS.

*Community Involvement*

On April 29, 2015, a notice regarding EPA's Five Year Review of the Asbestos Dump Superfund Site was published on the Long Hill Township's website at the following web address: http://www.longhillnj.gov/notices/asbestos-dump-2015.pdf. A hard copy of the notice was also posted on the Community Bulletin Board in the Town Hall located at 915 Valley Road, Gillette, New Jersey.

Once the five-year review is completed, the results will be made available at the local site repository, which is at the Long Hill Township Public Library located at 917 Valley Road, Gillette, New Jersey 07933. In addition, efforts will be made to reach out to local public officials to inform them of the results.

*Document Review*

The documents, data and information which were reviewed in completing this five-year review are summarized in Table 3.

*Data Review*

Groundwater, surface water and sediment monitoring activities have been conducted since the third five-year review in 2010 (See Figure 1, Figure 2 and Figure 3 for sampling locations). In April 2011, EPA collected groundwater samples from three monitoring wells at OU1 (MW-901, MW-906 and MW-907), two monitoring wells at OU2-New Vernon Road (MW-A, MW-C), and eleven sediment samples were collected in the vicinity of MSD-4 and MSD-5 in the Passaic

River at OU1. In July 2011, EPA collected a total of 35 sediment samples along the Passaic River at OU1 in the vicinity of MSD-4 and MSD-5. In April 2015, NJDEP collected groundwater samples from 13 monitoring wells: seven wells at OU1 (MW-901, 902, 903, 904, 905, 906 and 907), three wells at OU2-New Vernon Road (MW-A, B, and C) and three wells at OU2-White Bridge Road (MW-D, E, and F). In addition, surface water and co-located sediment samples were collected from five locations along the Passaic River in the vicinity of the OU1 property (MSW-1/MSD-1, MSW-2/MSD-2, MSW-3/MSD-3, MSW-4/MSD-4, MSW-5/MSD-5. Groundwater, surface water and sediment samples were analyzed for asbestos and results for each medium are discussed below.

Groundwater

For all groundwater samples collected during the April 2011 and April 2015 sampling events, asbestos was not detected above 7 MFL which is the MCL for asbestos in groundwater, with the exception of samples collected from MW-A. MW-A was reported to have less than 9.8 MFL in the April 2011 sampling event and less than 18.5 MFL in the April 2015 sampling events. In these two cases, the laboratory detection limits for MW-A at OU2-New Vernon Road were reported to be above the MCL due to high turbidity. When turbidity is high the filtered sample volume is small. Since sample volume is used in the denominator of the detection limit calculation, a turbid sample results in a higher detection limit. Historical data for OU2-New Vernon Road indicated that asbestos has not been detected in these wells; therefore, the laboratory detection limit issue is not perceived to be a cause for concern. Results for groundwater samples collected at OU1 and OU2 for the Asbestos Dump Superfund Site from 2008 to 2015, with the exception of the aforementioned MW-A results, have been consistently below the MCL. In order to ensure representative samples of MW-A are collected in the future and in order to address the analytical laboratory issue, EPA has recommended that NJDEP redevelop this well before the next sampling event address the high turbidity level.

Surface Water

Surface water samples were collected by NJDEP at five locations (MSW-1, 2, 3, 4, and 5) along the Passaic River behind the OU1 asbestos mound in April 2015. Asbestos was not detected above the NJDEP surface water quality standard of 7 MFL and has consistently been below 7 MFL in all surface water samples collected between 2008 and 2015.

Sediment

As a follow-up action to the 2010 five-year review, sediment sampling was conducted by EPA in April 2011 and July 2011. During the April 2011 sampling event, 11 sediment samples were collected in one-foot intervals (2 upstream and 2 downstream of the MSD sample point where asbestos was detected plus the original SD location and duplicate/blank samples) for MSD-4 and MSD-5. All 11 sediment samples had detections of asbestos ranging from 1.25% to 3% chrysotile. As a result, additional sediment sampling was conducted in July 2011 to determine the extent of asbestos levels in the sediment. A total of 35 sediment samples were collected by EPA in 30-foot intervals close to the river bank from MSD-4 to 150 feet upstream of MSD-5. In addition, sediment samples were collected from the middle of the Passaic River between MSD-4 and MSD-5 in 100-foot intervals. Asbestos was not detected in any of the 35 sediment samples collected in the July 2011 sampling event. Sediment samples were also collected from five locations (MSD-1, 2, 3, 4, and 5) by NJDEP in 2015. Asbestos was not detected in four of the

sediment samples. MSD-4 was reported to contain 2% Chrysotile. The results indicate localized detections of asbestos in sediment. However, these sediments are consistently submerged leaving the asbestos material wet and reducing the threat of friability. However, since anomalous results have been reported for various sediment locations, EPA has asked NJDEP to increase the monitoring frequency of the sediment at OU1. Sediment samples will be collected from five locations at OU1 two times within the next five-year period.

*Site Inspection*

The inspection of the site was conducted on January 15, 2015. In attendance were Theresa Hwilka (EPA-RPM), Diana Cutt (EPA-Hydrologist), Marian Olsen (EPA-Human Health Risk Assessor), and Mindy Pensak (EPA-Ecological Risk Assessor). The purpose of the inspection was to assess the protectiveness of the remedy.

The Site inspection consisted of a physical inspection of the OU1, OU2-New Vernon Road and OU2-White Bridge Road portions of the Asbestos Dump Superfund Site. Inspection findings for each area are presented below.

OU1

Seven groundwater monitoring wells are located at OU1 including MW-901, 902, 903, 904, 905, 906, and 907. Upon arrival at the site, the access gate to the asbestos mound was locked. Perimeter fencing was in good condition. The inspection team walked across the asbestos mound and inspected the integrity and grade of the cap along with the groundwater monitoring wells. The cap had been recently mowed and was not overgrown with vegetation. There was a noticeable depression in the asbestos mound between monitoring wells 902 and 903. The inspection team observed the retaining wall around the foot of the mound (western edge) which appeared to be in good condition. All monitoring wells were locked; however, the interior caps of all seven wells were missing. In addition, some minor settling and erosion was observed around the outside base of MW-902 and the well casing of MW-907 was flush with the grout which is indicative of some settling of the well. MW-906, which is located in the parking lot under a manhole adjacent to the asbestos mound, was protruding above grade preventing the manhole cover from resting flush with the ground surface.

EPA discussed the findings of the inspection with NJDEP. The minor erosion of sections of the concrete well pads will be repaired and missing well caps will be replaced as part of routine O&M activities.

OU2 New Vernon Road

Three groundwater monitoring wells are located at OU2 New Vernon Road including MW-A, B and C. All monitoring wells at this location were locked and interior wells caps were in place. Animal activity was observed inside MW-B. Mice had created a nest beneath the outer locked well cap; however, the interior cap on the well was in place. The inspection team walked around the perimeter and across the asbestos cap. The vegetative cap appeared to be well maintained and appeared to have been recently mowed. There were no obvious signs of drainage issues or breaches in the cap. However, the inspection team noticed that several of the white vents on the mound had been damaged and will need to be repaired.

EPA discussed the findings of the inspection with NJDEP. Damaged vents will be repaired as part of routine O&M activities.

OU2 White Bridge Road

Three groundwater monitoring wells are located at OU2 White Bridge Road including MW-D, E, and F. New locks were installed by NJDEP one week prior to our site inspection and a key was provided to EPA. All monitoring wells at this location were locked and interior wells caps were in place. During the inspection of MW-F, leftover rolls of geotextile fabric were observed on the ground near the well. The fabric was likely leftover from previous O&M activities. The inspection team walked around the perimeter of the landfill area. The rip-rap material around the cap was well maintained as was the upper vegetative portion of the cap. There was no evidence of burrowing animals or drainage issues.

EPA discussed the findings of the inspection with NJDEP. The geotextile rolls will be removed from the property as part of routine O&M activities.

*Interviews*

During the five-year review process, EPA spoke with representatives of FWS, and the OU1 and OU2-White Bridge Road property owners. No significant issues related to the five-year review inspection were noted. Prior to the site inspection, EPA also spoke with representatives of NJDEP regarding the remedies and NJDEP indicated that they did not have any specific concerns involving the selected remedies.

Subsequent to the five-year review inspection, EPA spoke with representatives of NJDEP and the property manager of the OU1, Tifa Realty property, after learning of an emergency pipe repair that involved disturbance of a small portion of the parking lot pavement on the property. The disturbed area of the parking lot contained excavated soil along with pieces of broken tile (suspected of containing asbestos). On June 18, 2015, EPA visited the property, observed the excavation and took samples of the broken tile and soil. Sample results indicated that no asbestos was detected in the soil but the broken tiles were reported to contain 35% asbestos. These results were communicated to the property manager and NJDEP. EPA informed the property manager that if there were any additional emergencies in which an excavation needed to be performed beneath the parking lot, then all excavated material should be tested for asbestos and handled by a properly licensed asbestos contractor. NJDEP is also reviewing the current Deed Notice filed on this property to determine if modification of the document is necessary to ensure that areas of the property outside of the fenced asbestos mound are adequately addressed to maintain protectiveness of human health and the environment. In addition to the Deed Notice, pursuant to a 2003 settlement agreement between Tifa and NJDEP, Tifa shall not sell or otherwise alienate the property without approval from NJDEP.

*Institutional Controls Verification*

A Deed Notice was filed by Tifa Realty, Inc., in the Morris County, New Jersey, Office of the County Clerk, on September 8, 2008 for the OU 1 Millington property designated as Block 12301, Lot 1 on the Long Hill Township tax map. The OU1 Millington property consists of approximately 11 acres, with the restricted area comprising approximately five acres. The landfill, which is located on the five-acre restricted area, is surrounded by a fence, and contains

approximately 90,000 cubic yards of asbestos and asbestos-containing materials. The types of restrictions placed on the OU1 Millington property significantly limit any type of intrusion onto the landfill, thereby restricting on-site groundwater usage and limiting development on the asbestos fill areas. Any use of the landfill area must be designed to protect the integrity of the components of the landfill.

As was stated above, based on some information collected as a result of an emergency pipe repair in the parking lot of the OU1 property, NJDEP is re-evaluating the deed notice on the OU1 Millington property to ensure that it is adequate.

In January 2002, EPA, NJDEP and FWS reached an agreement on the terms of the transfer of a portion of the New Vernon Road property to FWS to expand the GSNWR. In September 2002, an approximately 25 acre portion of the New Vernon Road property (Block 225, Lot 30) was formally transferred to FWS and is now in use as part of the Refuge. This Lot also includes the residential structures along New Vernon Road. The remaining five acre portion of the property (Block 225, Lot 30.03), which contains the solidified ACM, was transferred to the State of New Jersey. NJDEP is conducting the O&M activities on the five acre parcel of the property.

Subsequent to the division of the New Vernon Road property between NJDEP and FWS, separate Deed Notices were filed for Block 225, Lots 30 and 30.03. The Deed Notice for Block 225, Lot 30 was filed in the Morris County, New Jersey, Office of the County Clerk on August 20, 2002. The Deed Notice includes a "Limited Subsurface Use Area" which exists within 10 feet of the foundation of the residences. This area is restricted because it could not be fully investigated for the presence of asbestos because such investigation would have compromised the integrity of the substructure. Digging and excavating more than 12 inches below the surface of the Limited Subsurface Area is prohibited unless approved by EPA or the NJDEP. The Deed Notice for Block 225, Lot 30.03, which pertains to the five-acre capped OU2 parcel, was filed in the Morris County, New Jersey, Office of the County Clerk on October 22, 2002. The Deed Notice specifies the restrictions placed on the capped area of OU2. The Deed Notice does not permit any disturbance of the surface or subsurface of the capped area including, but not limited to filling, drilling, excavation, or the removal of topsoil, sediments, rock or minerals, or by construction, planting anything other than grass or wildflowers, or changing the topography in any manner; however, topsoil may be added to make repairs in accordance with the Deed Notice. Changing, damaging or removing the perimeter trench around the solidified mass, the manholes or the monitoring wells is also prohibited.

On January 5, 2001, the owners of the OU2 White Bridge Road property filed a Deed Notice with the Morris County Clerk. The Deed Notice has the same general restrictions as those included in the New Vernon Road Deed Notice whereby any disturbance of the surface or subsurface cap is strictly prohibited. In addition, the White Bridge Road Deed Notice specifically prohibits the following: horseback riding; any type of pasturing what would result in a permanent pattern on the solidification area or that will cause damage to the vegetative cover; any activity that might compromise the integrity of the solidified mass or its cap; and moving the fence posts installed on the top of the solidified mass area.

**Technical Assessment**

*Question A: Is the remedy functioning as intended by the decision documents?*

The remedy is functioning as intended as it has eliminated exposure to ecological receptors as well as to direct human exposure to asbestos through inhalation, ingestion and dermal contact. This has been achieved by capping ACM with a geotextile and geogrid material and two feet of soil cover, along with a retaining wall for slope stabilization at OU1, and excavating and consolidating ACM, solidification/stabilization of ACM, and installation of a cover consisting of a synthetic liner, fill and topsoil at OU2. Based upon the site inspection, it appears that the caps are in good condition, and have not been impacted by burrowing animals.

Surface water and sediment samples continue to be collected and analyzed for asbestos. It should be noted that there are no asbestos values for the protection of flora and fauna. Except for an anomalous event in sediment sampling in 2011, all samples show asbestos below action levels for sediment and surface water.

All groundwater samples taken from April 2011 to April 2015, had no exceedances of asbestos above the MCL. However, analytical sensitivity levels for MW-A at OU2- New Vernon Road were reported to be <9.8 MFL in the April 2011 groundwater sample and <18.5 MFL in the April 2015 groundwater sample, due to high turbidity. Historical data for OU2-New Vernon Road indicated that asbestos has not been detected in these wells; therefore, the analytical sensitivity issue is not perceived to be a cause for concern. Results for groundwater samples collected for the Asbestos Dump Superfund Site from 2008 to 2015 have been consistently below the MCL. It is recommended that MW-A be redeveloped in order to reduce the turbidity levels before the next sampling event to ensure elevated detection limits are a result of high turbidity.

Institutional controls, in the form of deed notices, are in place for OU1 and OU2. The deed notices are intended to prevent unacceptable use of ASM landfill areas and solidified material remaining at depth and to prohibit the use of groundwater. The ICs appear to be functioning as intended, however, an emergency pipe repair shows that land owners disturbed the OU1 cap without notifying EPA. NJDEP is evaluating the IC to ensure the instrument is adequate to prevent future cap disturbances without notification.

*Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?*

The RAOs used at the time of the remedy remain valid. There have been no changes in the physical conditions of the Site or land use that would affect the protectiveness of the remedy. In addition, land and resource use in the area has not changed and is not expected to change in the future.

**Soil**

The OU1 and OU2 remedies continue to provide a barrier to ecological receptors as well as to direct human exposure to asbestos through inhalation, ingestion and dermal contact of soil containing asbestos. Remediation goals were not selected for soil since asbestos-containing soils were capped. Institutional controls are in place in order to prevent potential damage to the landfill caps that may result in potential exposures. At the time of the Site inspection, the caps appeared to be well maintained. NJDEP is also reviewing the current Deed Notice filed on this property to determine if modification of the document is necessary to ensure that areas of the

property outside of the fenced asbestos mound are adequately addressed to maintain protectiveness of human health and the environment.

**Groundwater**

Groundwater results, with the exception of an analytical anomaly at one location, show asbestos concentrations continue to remain below the MCL. In addition, the area surrounding the OU1 property is served by a public water supply system and there are no downgradient potable wells within the vicinity of OU1 or OU2.

**Surface Water**

Surface water samples collected over the last five years show that asbestos concentrations remain below the NJDEP surface water quality standard of 7 MFL.

**Sediment**

Sediment samples over the last five years show variable results with some samples containing asbestos greater than 1% chrysotile. Although these exceedances have occurred, they are isolated and remain submerged. The sediment is expected to remain submerged and asbestos will remain wet and friability is not a concern. Due to the variability of results over the last five years, EPA has recommended that NJDEP sample sediments twice over the next five years. NJDEP has agreed to this recommendation.

**Vapor Intrusion**

Asbestos is not a volatile substance. Furthermore, the asbestos containing material is covered by a cap and there are no structures located above the landfill areas of OU1 and OU2. Therefore, further evaluation of the vapor intrusion pathway was not conducted.

*Question C: Has any other information come to light that could call into question the protectiveness of the remedy?*

No other information has come to light that could call into question the protectiveness of the remedy.

*Technical Assessment Summary*

According to the reviewed data and the Site inspection, the OU1 and OU2 remedies are functioning as intended by the decision documents.

**Issues, Recommendations and Follow-Up Actions**

There are currently no issues that affect current or future protectiveness of the remedy.

Follow-up action items were identified during this five-year review; however, they do not affect the current protectiveness of the remedy:

- NJDEP will collect sediment samples twice within the next five-year review cycle to more closely monitor sediment in the Passaic River behind the OU1 mound due to the sporadic detection of asbestos in recent sampling results.
- MW-A will be considered for redevelopment to address turbidity issues. Wells at OU1 will also be evaluated to determine if well redevelopment or modifications to sampling techniques would be necessary to benefit future sampling events.
- Minor settlement issues surrounding monitoring wells and the OU1 cap will be addresses as part of routine O&M activities.
- NJDEP will review the adequacy of the OU1 institutional controls to ensure that property notification requirements are included.

**Protectiveness Statement**

| **Protectiveness Statement(s)** | | |
|---|---|---|
| *Operable Unit:*<br>OU1 | *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>*The remedy at OU1 is protective of human health and the environment.* | | |

| **Protectiveness Statement(s)** | | |
|---|---|---|
| *Operable Unit:*<br>OU2 | *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>*The remedy at OU2 is protective of human health and the environment.* | | |

| **Sitewide Protectiveness Statement** | |
|---|---|
| *Protectiveness Determination:*<br>Protective | *Addendum Due Date (if applicable):* |
| *Protectiveness Statement:*<br>*The remedies at OU1 and OU2 are protective of human health and the environment.* | |

**Next Review**

The next five-year review report for the Asbestos Dump Superfund site is required five years from the completion date of this review.

Tables

Table 1: Chronology of Site Events

| Event | Date(s) |
|---|---|
| Manufacturing of asbestos began at Millington Plant | 1927 |
| Asbestos-containing material dumped at OU1 Millington property | 1930's-1960's |
| Asbestos-containing materials dumped at OU2 and OU3 properties | 1960's-1970's |
| Site placed on the National Priorities List | September 1983 |
| EPA issued Notice Letter to National Gypsum Company | September 1984 |
| EPA issued Administrative Order on Consent to National Gypsum to conduct the RI/FS | April 1985 |
| National Gypsum performed RI | 1985-1986 |
| RI Report submitted (EPA deemed it adequate for Millington property but not for the other contaminated properties and divided site into separate OUs) | May 1987 |
| ROD for OU1 Millington | September 1988 |
| EPA issued a UAO to National Gypsum to perform RD/RA at OU1 | September 1989 |
| EPA collected and analyzed soil and dust samples from OU2 | August 1990 |
| National Gypsum filed for bankruptcy | October 1990 |
| Removal activities at OU2 conducted | Fall 1990 |
| OU2 RI/FS | 1990-1991 |
| ROD for OU2 New Vernon Road and White Bridge Road | September 1991 |
| SSC for OU2 | May 1993 |
| Explanation of Significant Differences to modify OU2 solidification depth. Depth was decreased to ensure that the solidified/stabilized mass remained above the water table. | October 1993 |
| OU2 Remedial Action begins | August 1994 |
| The Remedial Action Report for the White Bridge Road portion of OU2 was approved | December 1997 |
| EPA acquires the OU2 New Vernon Road property | June 1998 |
| OU3 ROD | September 1998 |
| OU1 Remedial Action | June 1999-June 2000 |
| OU1 Construction Complete | June 2000 |

| | |
|---|---|
| First Five-Year Review completed for OU1 and OU2 | September 2000 |
| EPA approved the OU1 Remedial Action Report and 30-Year Operation and Maintenance Plan | September 2001 |
| EPA deleted the OU2 White Bridge portion of the Site from the NPL | February 2002 |
| A 25-Acre portion of the New Vernon Road property was formally transferred to FWS and is now part of the Great Swamp National Wildlife Refuge | September 2002 |
| Second Five-Year Review completed for OU1 and OU2 | September 2005 |
| Final Close-Out Report for OU1, OU2 New Vernon and OU3 completed | November 2009 |
| Deletion of OU1, OU2 New Vernon Road, and OU3 | July 2010 |
| Third Five-Year Review completed for OU1 and OU2 | September 2010 |
| Five-Year Review Follow-Up Sampling | April-July 2011 |
| Five-Year Review Sampling for 2015 Review | April 2015 |

Table 2: Remediation Goals for Groundwater and Surface Water

| **Contaminants of Concern** | **Groundwater Federal MCL (million fibers/liter)** | **Surface Water NJDEP Surface Water Criteria (million fibers/liter)** |
|---|---|---|
| Asbestos | 7 | 7 |

Table 3: Documents, Data and Information Reviewed in Completing the Five-Year Review

| **Document Title, Author** | **Submittal Date** |
|---|---|
| Five-Year Review Report, Asbestos Dump Superfund Site, Meyersville, Morris County, New Jersey, EPA Region 2 | September 2005 |
| Record of Decision, Asbestos Dump Millington Site, Millington, New Jersey, EPA Region 2 | September 1988 |
| Record of Decision, Asbestos Dump, New Vernon Road and White Bridge Road Sites, EPA Region 2 | September 1991 |
| Operation & Maintenance Plan, Asbestos Dump Site-Operable Unit Two, New Vernon Road Property, EPA Region 2 | June 2001 |
| Operation & Maintenance Plan, Asbestos Dump Site-Operable Unit Two, White Bridge Road Property, EPA Region 2 | July 2001 |

| Table 3: Documents, Data and Information Reviewed in Completing the Five-Year Review | |
|---|---|
| 30 Year Operation and Maintenance Plan, Asbestos Dump Superfund Site, Operable Unit No. 1, Millington, New Jersey, IT Corporation | January 2001 |
| Groundwater and Surface Water Data for Operable Units 1 and 2, NJDEP | April 2008 |
| Groundwater, Surface Water and Sediment Data for Operable Units 1 and 2, EPA Region 2 | June 2010 |
| Superfund Final Site Close Out Report, Asbestos Dump Site, Meyersville, Morris County, New Jersey, EPA Region 2 | November 2009 |
| Direct Final Notice of Deletion of the Asbestos Dump Superfund Site from the National Priorities List, EPA Region 2 | April 2010 |
| Notice of intent to Delete the Asbestos Dump Superfund Site from the National Priorities List, EPA Region 2 | April 2010 |
| Groundwater, Surface Water and Sediment Data for Operable Units 1 and 2, EPA Region 2 | April 2011 |
| Sediment Data for Operable Units 1, EPA Region 2 | July 2011 |
| Groundwater, Surface Water and Sediment Data for Operable Units 1 and 2, NJDEP | April 2015 |

# Figures

Figure 1

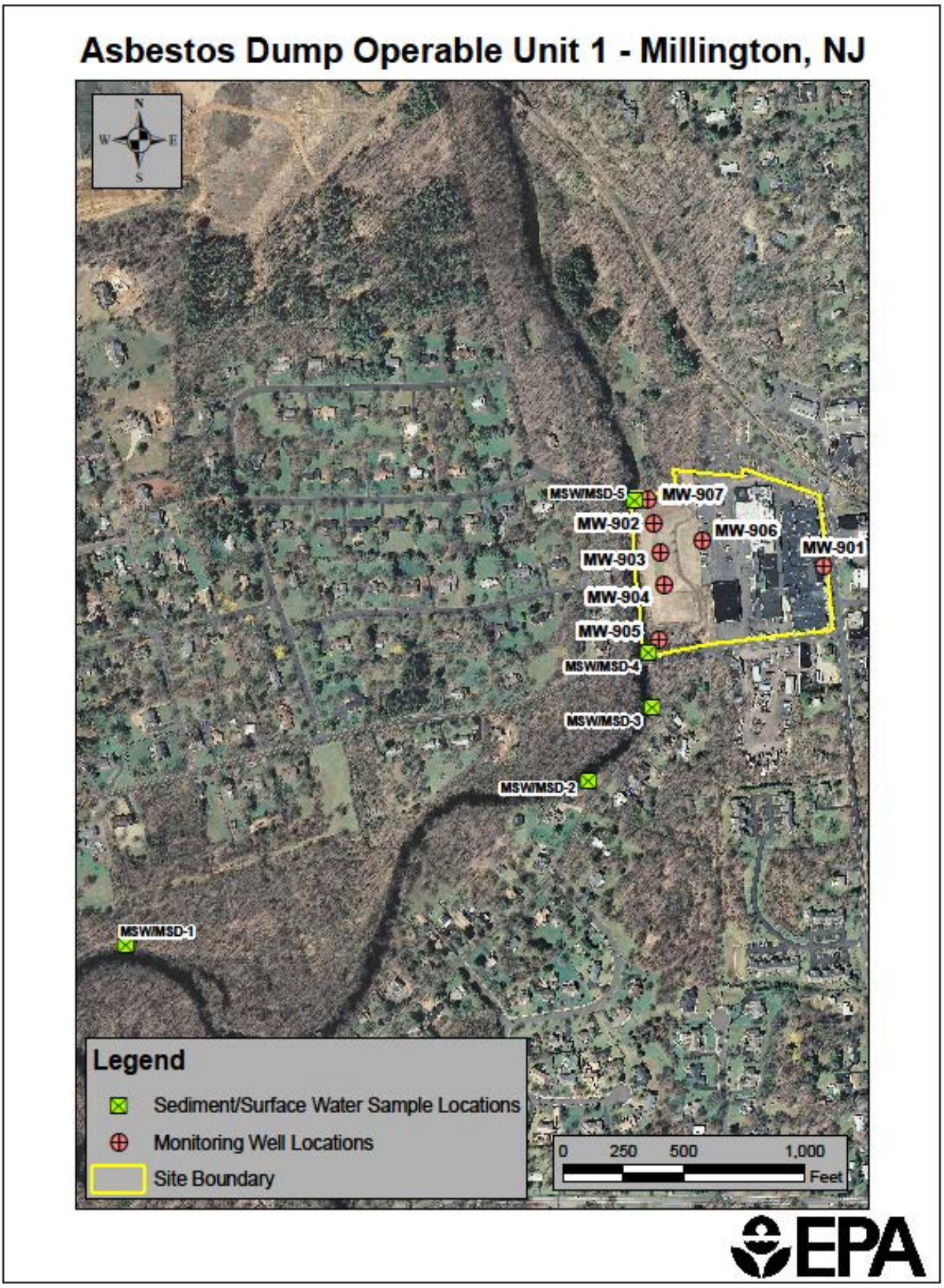
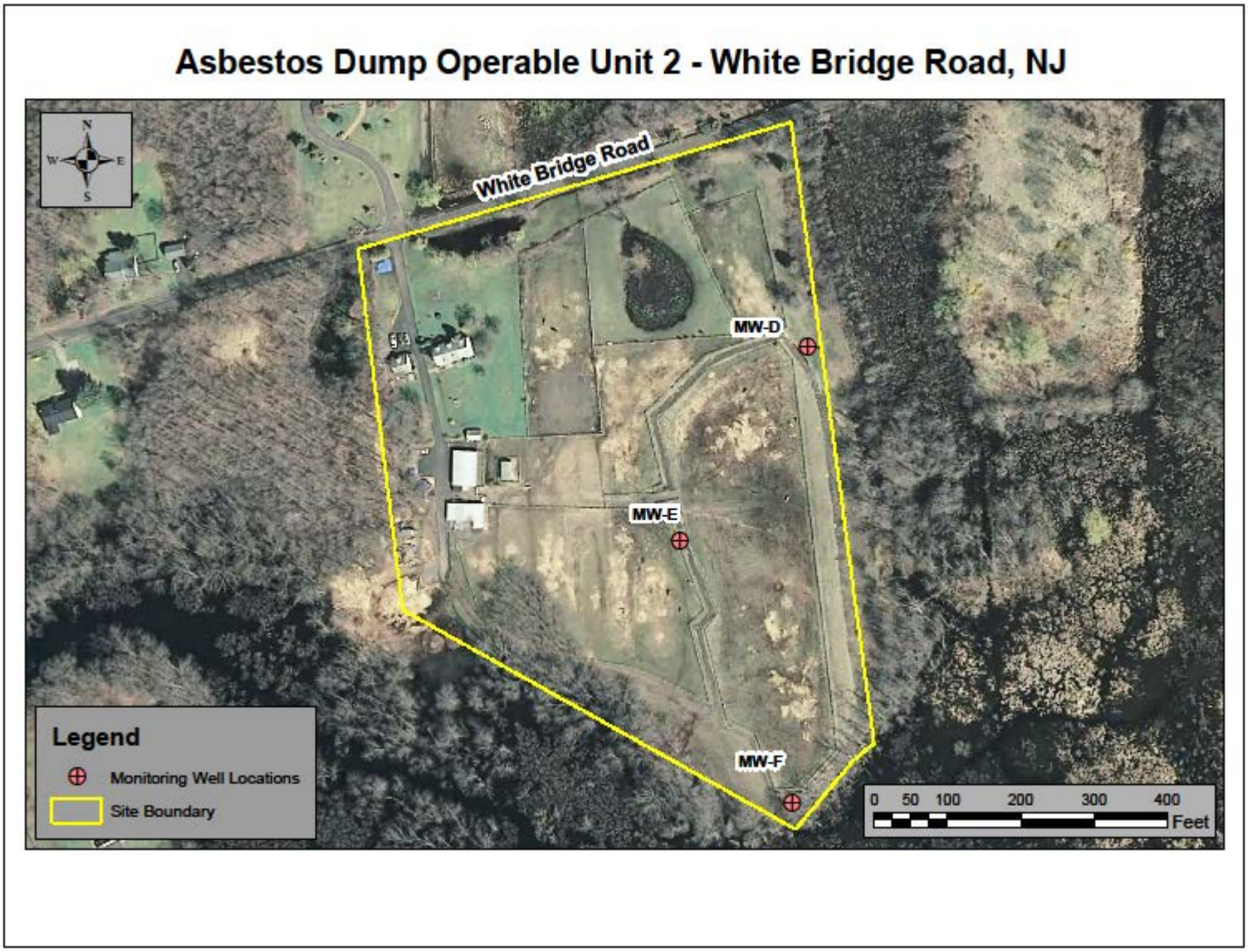

Asbestos Dump Operable Unit 1 - Millington, NJ
N
W
E
S
MSW/MSD-5
MW-907
MW-902
MW-906
MW-901
MW-903
MW-904
MW-905
MSW/MSD-4
MSW/MSD-3
MSW/MSD-2
MSW/MSD-1
Legend
Sediment/Surface Water Sample Locations
Monitoring Well Locations
Site Boundary
0
250
500
1,000
Feet
EPA

Figure 2


Asbestos Dump - Operable Unit 2 - New Vernon Road, NJ
N
W
E
S
MW-A
MW-B
MW-C
New Vernon Road
Legend
Monitoring Well Locations
Site Boundary
150 75 0 150 300
Feet

Figure 3


Asbestos Dump Operable Unit 2 - White Bridge Road, NJ
N
W
E
S
White Bridge Road
MW-D
MW-E
MW-F
Legend
Monitoring Well Locations
Site Boundary
0 50 100 200 300 400
Feet